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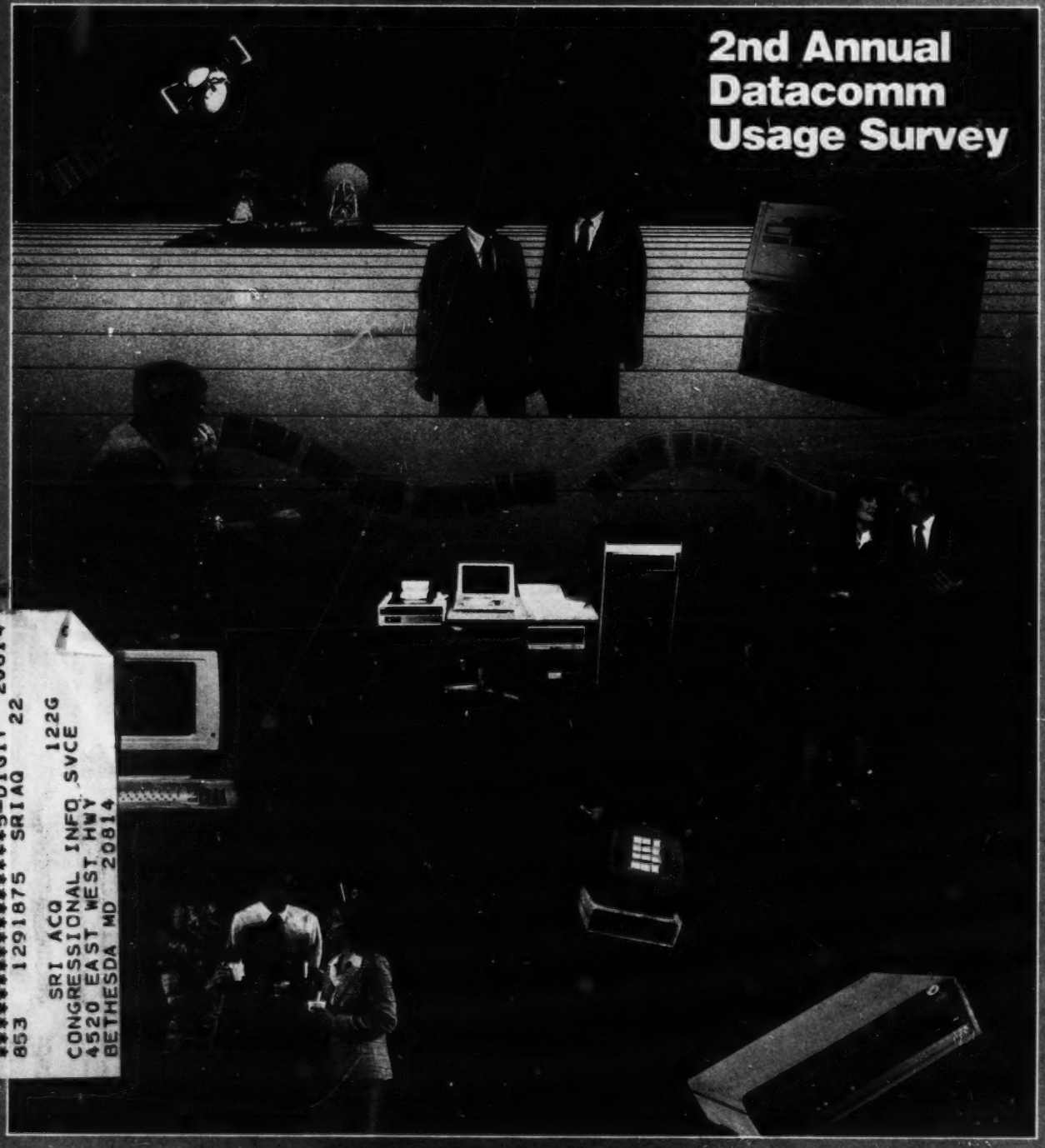
5th Semiannual Review of Microcomputer Software Packages

Power Protection • MIS User Groups • Selecting Applications Software

2nd Annual Datacomm Usage Survey



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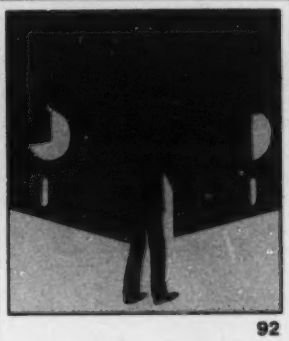

92

FEATURES

30
2nd Annual Datacomm Usage Survey: **MIS/DP Tightens Grip on Systems**

38
The Wake of Divestiture
The breakup of AT&T has caused many to shake their heads in disbelief at vendor bickering and confusing price structures.

42
Inforum:
'Insurmountable Opportunities'

48
Snyders on Software:
The Second Generation

56
Resource Sharing: The Promise of Local Area Networks
Will the corporate masses gain low-cost access as personal computers make mainframe connections?

62
Making the Most of User Groups
An excellent forum is available in which users and vendors can exchange ideas.

72
Conversion: The Problems Go On
What are the alternatives when an operating system no longer meets increased application demands?

76
Manufacturing Info:
Our Self-Inflicted Wounds in Labor Relations

78
The UPS & Downs of Power Protection
With micros processing critical information, power fluctuations can be more than just inconvenient.

84
Technology Info:
Which is the Fairest Display of Them All?

86
Micro Business: **The 'Highest Paid' Programmer**

88
Why Prototyping Works
A crisis at a major corporation proved to be the catalyst for a radically different approach to systems development.

92
Software Selection Made Easy
Involving users and MIS, spelling out needs, and putting requests in writing are among the procedures suggested.

94
Spotlight: **The Security Vow**

100
5th Semiannual Microcomputer Software Review:
Versatility in Software Important to PC Selection

122
The Diebold Report:
Computers are Changing the Way Your Company Competes

INFOSYSTEMS is proud to announce that the international consulting organization, The Diebold Group, will be contributing an article every other month on management and technology. This month in the premier of "The Diebold Report," John Diebold, author of the prophetic book *Automation* and the recently released *Managing Information*, writes about strategic uses of information (see page 122).

INSIDE INFO

10 California Assembly sets about planning for 'information age'
12 Systems address network management, mainframe-to-mainframe
14 'Box canyons' are not the problem for Prime Computer users
16 Bay Area executives use PCs as after-fact tool, to communicate
25 Dallas Infomart opens with Unix

APPLICATION REPORTS

68 Adventures of an MIS Consultant in Saudi Arabia

DEPARTMENTS

6 Feedback
8 Editor's Perspective
28 Arnie
50 Info Software
110 Products/Services Info
119 Literature
120 Plan Ahead
120 Bookcase
121 Ad Index

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2nd Annual Datacomm Usage Survey

MIS/DP Tightens Grip on Systems

Divestiture of AT&T, equipment compatibility, lack of expertise, and multivendor environment are cited as leading problems by managers.

By Chuck Cozette, Associate Editor
and Ray Winkler, Manager, Market Research

If data processing/management information systems (DP/MIS) managers were to have as many heads as they have professional hats to wear, they'd be likely candidates for either a late-night horror movie or Ripley's Believe It or Not.

One such hat, of the 10-gallon variety if scope of responsibility is any measure, encompasses the area of data communications. A recent INFOSYSTEMS' study revealed that almost 80 percent of more than 1,100 DP/MIS managers surveyed have direct responsibility for data communications within their companies. Of the almost 13 percent of the respondents who indicated such responsibilities are handled by a datacomm manager, 71.6 percent said that the individual reports to DP/MIS.

The survey, conducted in January by Hitchcock Research Services of Wheaton, IL, was mailed to 4,000 DP/MIS management-related individuals representing a broad cross-section of industries across the US. Replies were received from 1,160 recipients. This is the second year of the survey sponsored by INFOSYSTEMS.

For the average DP/MIS manager, the responsibility for data communications is a mixed blessing.

On the one hand, this responsibility can mean an expanded corporate role for DP/MIS managers. At least 93 percent of survey respondents indicated the presence of a data communications system within their companies. More than half of the respondents said that moderate to substantial expansion was being planned for.

Where there is an opportunity, however, liability may not be far away. As might be expected, DP/MIS managers are not without ammunition when it comes to citing difficulties in the installation and use of data communications systems.

It would probably come as little surprise to even the casual phone user that post-divestiture AT&T headed the list as a source of problems. Confusion regarding responsibility for particular services ranks as the primary problem, according to the survey, although delays

in line and equipment installation also were mentioned repeatedly.

"Since the breakup of AT&T, it has become very difficult to install even the simplest data communications equipment," commented one respondent. "We are dealing with four or five separate entities and the new divisions are very confused. They (AT&T) are not marketers nor are they aware that they must perform in a competitive arena."

Another respondent summarized what seemed to be a general perception re-

Products and Services

	Presently Use	Plan to Add in Next 12 Months
Terminals	58.6%	41.8%
Modems	59.4%	39.4%
Printers	37.1%	34.8%
Microcomputers	76.1%	39.2%
Communications software	66.8%	36.1%
PBX interface	40.8%	19.5%
Communications processors	46.5%	18.0%
Micro-to-mainframe links	33.7%	55.1%
Multiplexers	37.4%	22.4%
PBX/Data Voice	22.4%	7.9%
Centrex Systems value-added packet switching	41.3%	14.3%
Local area networks	26.6%	33.1%
Diagnostic and test equipment	29.0%	14.4%
Local area network	20.7%	30.6%
Network control system	16.9%	19.9%
Public data	16.6%	9.7%
Public Value-added data	13.6%	12.3%
Base	1,087	771
	100%	100%

Number of Respondents by Job Title

	No. of Respondents	Percent
DP/MIS Operations		
DP/MIS Management	799	68.9%
DP/MIS Supervisory	113	9.7%
DP/MIS Staff	52	4.5%
Sub-Total	964	83.1%
Company Management		
General and Corporate Mgmt.	67	5.8%
Financial Management	54	4.7%
Administrative Services Mgmt.	55	4.7%
All Other	20	1.7%
Sub-Total	196	16.9%
Total Respondents	1,160	100%

Expansion Plans by Present Users (Next 12 Months)

	Local Systems	Metropolitan Area Systems	Long Distance Systems
Base: Presently Have System	1,087 100%	335 100%	612 100%
Will expand moderately	42.1%	42.7%	38.1%
Will expand substantially	11.8%	9.6%	15.4%
Will change or replace present systems	12.5%	11.3%	12.5%
No changes planned	36.2%	36.5%	37.1%

> ***"Sales people do not understand network technology and sometimes don't even understand their own products."***

garding AT&T, "The left hand no longer seems to know what the right hand is doing."

Equipment incompatibility and lack of expertise, both in-house and by service representatives, were other problems consistently cited. One respondent, typifying the feelings of many in DP/MIS, complained, "Performance claims are not demonstrable and compatibility claims are not always true."

When products do not live up to their billing, many managers become frustrated with the lack of technical support from vendors. "Sales people do not understand network technology and sometimes don't even understand their own products, so selection of equipment is difficult. This is especially true when faced with major problems," explained one respondent. "Combine that with a multivendor environment requiring highly interactive communications and the lack of a multivendor communication standard and you have a real mess to deal with."

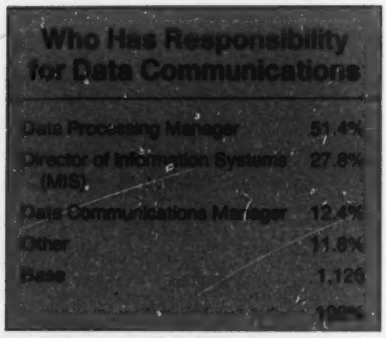
Such difficulties can pose further conflict when the DP/MIS manager responsible for data communications does not have final say in the purchase of equipment and services. The survey indicated that while 96 percent of the respondents were involved to some degree in purchasing decisions, with 56.1 percent responsible for specifying either the type of equipment or supplier, only 35.8 percent had authority to approve the purchase. These figures would suggest that in addition to the challenge of obtaining systems expertise, DP/MIS managers must continue to sharpen their diplomacy skills if they are to get purchases approved by designated executive officers and committees often preoccupied with the infamous "bottom line."

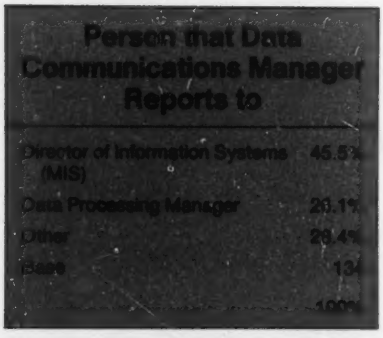
On the other end of the spectrum, many DP/MIS managers are also being held accountable by the end user, who, according to the survey, sometimes has input into the purchasing process. While user clout is usually limited, in at least one instance users had individual budgets with 100 percent authority to accept or refuse purchases. Survey results would seem to indicate, however, that more often than not, DP/MIS managers find themselves caught in the middle; answering to upper management for cost control and accountable to demanding end users for system performance.

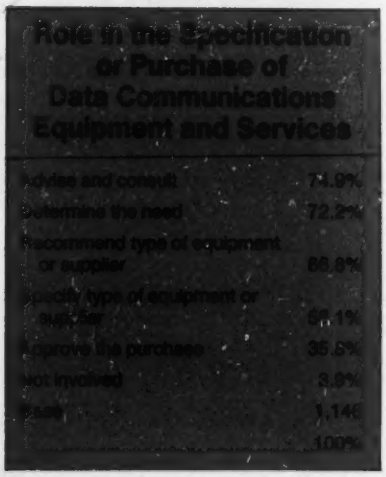
The diversity of the survey's sampling was reflected by a wide variation in datacomm usage. Approximately 94 percent of the respondents said they currently have local systems, up from 74.7 percent last year. Usage of long distance systems remained stable at about 54 percent, as did metropolitan area systems at approximately 30 percent.

Those using datacomm were asked to indicate their plans for expansion in the next year. Of those who said they have local systems, 42.1 percent said they will expand moderately, 11.6 percent plan substantial expansion; and 12.5 percent expect to change or replace their current system. Thirty-six percent plan no changes.

Despite dissatisfaction with AT&T,






Role in the Specification or Purchase of Data Communications Equipment and Services
Advise and consult 74.9%
Determine the need 72.2%
Recommend type of equipment or supplier 66.9%
Specify type of equipment or supplier 64.1%
Approve the purchase 35.8%
Not involved 3.9%
Base 1,146
100%

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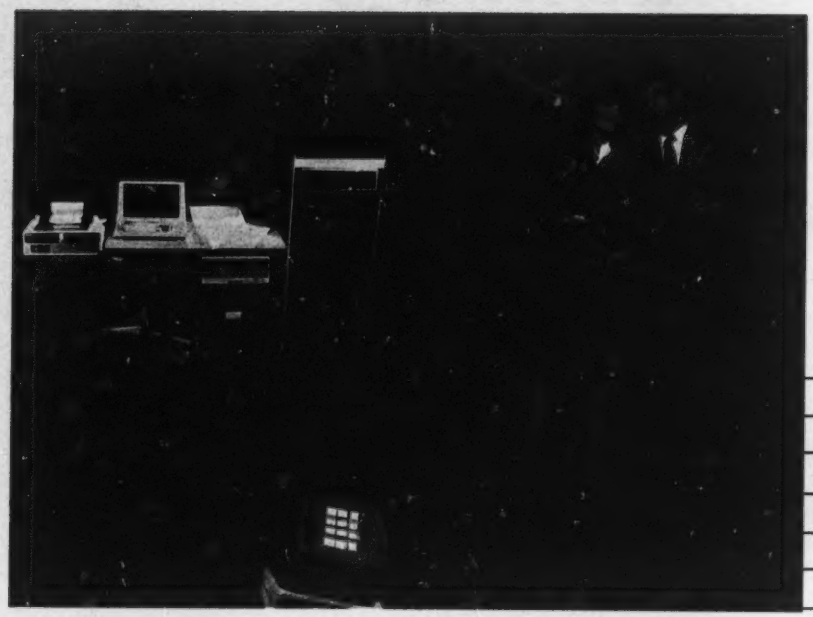

"Since the break-up of AT&T, it has become very difficult to install even the simplest data communications equipment."

managers of datacomm apparently still face a significant need to expand or adapt long distance systems. Of those with long distance systems, 38.1 percent plan to expand moderately; 15.4 percent substantially; and 12.6 percent expect to change or replace current systems. Thirty-seven percent plan no changes.

These predictions for expansion are slightly lower than last year's. While this could represent a mild leveling off of datacomm activity, it more likely signifies a lull in what in some cases has been a frenzy of activity. Companies may either be busy integrating equipment already purchased or taking a respite while awaiting new and improved technology.

In the area of integrated voice/data systems, however, implementation continues to lag significantly behind initial industry projections. While 26.2 percent expect moderate activity, up 11 percent over last year, extensive activity is still planned by fewer than four percent of the respondents. More significantly, the number of companies already having completed voice/data integration remained at only 1.7 percent.

The trend towards distributed processing continues to shape purchasing plans. Micro-to-mainframe links replaced terminals atop the list of products and services respondents plan to add in the next 12 months. While 43.7 percent of those surveyed already have micro-to-mainframe links, an astounding 55 percent plan to add initial or additional uploading and downloading capabilities. Approximately 40 percent of respondents intend to buy terminals, modems and/or microcomputers. Interest in local area networks continues to increase, with almost one third of the respondents planning purchases.

Priorities in purchasing were identical to last year's, as DP/MIS managers reaffirmed their desire to maximize "uptime." Product reliability once again headed the list as the most important purchasing consideration with a 9.26 rating on a 10-point scale. The performance of products according to specifications was a close second with a 9.19 rating, followed by the availability and speed of repair service, reputation for high quality products and system compatibility.

Unfortunately, tunnel-visioned vendors do not always share the DP/MIS manager's priorities. One respondent complained of difficulties in "finding vendors who will tell us exactly what we need. Everyone wants us to learn their business. They don't want to learn what we need and how we need to use their equipment."

While budgets, or lack thereof, seem to be a common topic of discussion at many professional conferences, monetary considerations do not appear to have a significant influence on purchasing decisions. For the second consecutive year, survey respondents ranked price next to last of the 12 categories most likely to influence a purchase. Other factors receiving write-in votes included ease of product usage, delivery time and vendor stability.

The breadth of considerations involved in datacomm management, whether in purchasing, implementation or operation, represents a significant frontier for many DP/MIS administrators. While such responsibility can be a burden, DP/MIS managers can take heart in knowing that success is possible, as evidenced by the handful of respondents who indicated they have no current problems with datacomm. (N)

Types of Data Communications Systems Being Used

	Presently Have		Don't Have Now But Plan to Add in Next 12 Months		Total that Have or Plan to Add in Next 12 Months	
	No.	Percent	No.	Percent	No.	Percent
Local Systems (on-site, campus)	1,087	93.7%	48	4.1%	1,135	97.8%
Metropolitan Area Systems	335	28.9%	97	8.4%	432	37.3%
Long Distance Systems	621	53.5%	127	10.9%	748	64.5%
Total-One or More Systems	1,109	95.6%	226	19.5%	1,147	98.9%
Total Respondents	1,160	100%	1,160	100%	1,160	100%

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